

ELECTRICAL DATA**HEATER OPERATION**

	12SL7GT	6SL7GT
Heater Voltage.....	12.6	6.3 Volts
Heater Current	150	300 Ma
Maximum Heater-Cathode Voltage	90	90 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽¹⁾

	Section No. 1 ⁽²⁾	Section No. 2 ⁽²⁾
Grid to Plate	2.8	2.8 Pf
Grid to Cathode.....	3.0	3.4 Pf
Plate to Cathode	3.8	3.2 Pf

Coupling

Plate to Plate	0.4	Pf
Grid to Grid	0.65	Pf
Grid Section No. 2 to Plate Section No. 1	0.13	Pf

RATINGS (Design Center Rating System) (Each Section)

Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	1.0 Watt
Positive Grid Voltage (Max.)	0 Volt

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier (Each Section)**

Plate Voltage	250 Volts
Grid Voltage	-2 Volts
Cathode Bias Resistor	870 Ohms
Plate Current	2.3 Ma
Transconductance	1600 μ mhos
Amplification Factor	70
Plate Resistance.....	44,000 Ohms

NOTES:(1) Standard 1 $\frac{1}{4}$ " diameter shield (EIA Std. M8-308) connected to cathode.

(2) Section No. 1 connects to pins 4, 5, and 6. Section No. 2 connects to pins 1, 2, and 3.

6SN7GTB**8SN7GTB, 12SN7GTA****HORIZONTAL MULTIVIBRATOR,
PHASE INVERTER, or
VERTICAL OSC. and AMP.****Medium Mu Double Triode**

Construction	Octal T-9
Base	Octal 8 Pin, B8-6 or B8-58
Basing	.8BD
Outline	9-11 or 9-41
Maximum Diameter	1.188 In.
Maximum Seated Height	2.750 In.
Maximum Overall Height	3.312 In.

ELECTRICAL DATA**HEATER OPERATION**

	12SN7GTA	8SN7GTB	6SN7GTB
Heater Voltage.....	12.6	8.4	6.3 Volts
Heater Current	300	450	600 Ma
Heater Warm-up Time	—	11	11 Seconds

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode

Total DC and Peak..... 200 Volts

Heater Positive with Respect to Cathode

DC..... 100 Volts

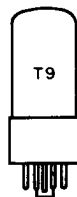
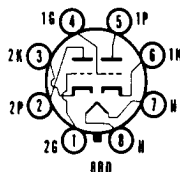
Total DC and Peak..... 200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1 ⁽¹⁾	Section 2 ⁽¹⁾
Grid to Plate	4.0	3.8 Pf
Input	2.2	2.6 Pf
Output	0.7	0.7 Pf

RATINGS (Design Center Rating System)

	Class A1 Amplifier	Vertical ⁽²⁾ Deflection Amplifier
Plate Voltage (Max.)	450	450 Volts
Peak Positive Plate Voltage (Abs. Max.)	—	1500 Volts
Plate Dissipation		
Each Plate (Max.)	5.0	5.0 Watts
Both Plates (Max.)	7.5	7.5 Watts



Peak Negative Grid Voltage (Max.)	—	250 Volts
Cathode Current (Max.)	20	20 Ma
Peak Cathode Current (Max.)	—	70 Ma
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	1.0	— Megohm
Cathode Bias (Max.)	1.0	2.2 Megohm
	Vertical⁽²⁾ Deflection Oscillator	Horizontal⁽²⁾ Deflection Oscillator
Plate Voltage (Max.)	450	450 Volts
Plate Dissipation		
Each Plate (Max.)	5.0	5.0 Watts
Both Plates (Max.)	7.5	7.5 Watts
Peak Negative Grid Voltage (Max.)	400	600 Volts
Average Cathode Current (Max.)	20	20 Ma
Peak Cathode Current (Max.)	70	300 Ma
Grid Circuit Resistance (Max.)	2.2	2.2 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier (Each Section)**

Plate Voltage	90	250 Volts
Grid Voltage	0	-8.0 Volts
Plate Current	10	9.0 Ma
Transconductance	3000	2600 μ mhos
Amplification Factor	20	20
Plate Resistance (Approx.)	6700	7700 Ohms
Plate Current at $E_c = 12.5$ Volts	—	1.3 Ma
Grid Voltage for $I_b = 10 \mu$ a (Approx.)	-7.0	-18 Volts

NOTES:

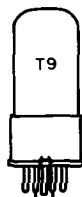
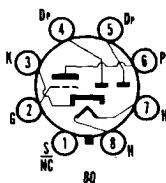
- (1) Section No. 1 connects to pins 4, 5 and 6. Section No. 2 connects to pins 1, 2 and 3.
 (2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

AUDIO DETECTOR and AMPLIFIER

6SQ7GT
12SQ7GT

Double Diode and High Mu Triode

Construction	Octal T-9
Base	Octal 8 Pin, B8-26
Basing	.8Q
Outline	9-12
Maximum Diameter	1.188 In.
Maximum Seated Height	2.750 In.
Maximum Overall Height	3.312 In.

**ELECTRICAL DATA****HEATER OPERATION**

Heater Voltage	12.6	6.3 Volts
Heater Current	150	300 Ma
Maximum Heater-Cathode Voltage	90	90 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)

Diode Plate No. 1 to Heater and Cathode	1.8 Pf
Diode Plate No. 2 to Heater and Cathode	1.8 Pf
Diode Plate No. 1 to Grid (Max.)	0.1 Pf

RATINGS (Design Center Rating System)

Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	0.5 Watts
Positive Grid Voltage (Max.)	0 Volt
Diode Current for Continuous Operation (Each Diode) (Max.)	1.0 Ma

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

Plate Voltage	100	250 Volts
Grid Voltage	-1	-2 Volts
Plate Current	0.5	1.1 Ma